

REMARKS

35 USC §103

Claims 5-8 and 10

The Moorman device cited by the Examiner addresses some of the same concerns of the present invention, including: obtaining a biopsy without thermal damage to the biopsy specimen, and ablating the biopsy track to prevent the seeding of tumor cells.

Moorman differs from the present invention, however, in that in Moorman, ablation is provided by microwave energy. The present invention, in contrast, is an RF ablation device providing conduction of electricity from the tip of a needle through the patient to a large area ground pad. Ground pads used and claimed in the present invention are not used in microwave ablation, and to make this clear, the claims have now been amended to indicate that RF ablation sources are used.

At column 2, lines 2-32, Moorman describes the difference between RF and microwave devices, noting that RF ablation relies on electrical conduction and that this creates a problem because tissue adjacent to the RF ablation electrode becomes desiccated or charred, thus limiting the tissue's conduction. Moorman teaches that microwaves are to be preferred because they avoid this charring problem, and proceeds to describe a microwave ablation needle. See column 2, lines 55-58.

Lennox teaches a standard RF ablation probe such as is well known in the art. However, Moorman, clearly aware of RF ablation, rejects it, and is oblivious to the possibility that shallow charring might be ideal for track cauterization where deep tissue ablation and damage is better avoided. Lennox does not teach track ablation at all and teaches at column 5, lines 49-56, that it is important to use RF power rather than microwave power because the latter will provide unwanted heating of the temperature probe. Thus both of these references teach away from the combination of the references.

Accordingly, it is believed that one of ordinary skill in the art knowledgeable about the fundamental differences between microwave and radio frequency ablation,

like Moorman, would not be led to modifying the Moorman-type device for RF ablation per Lennox.

In distinction, the present inventors have recognized, as indicated at paragraphs 12 and 15, that RF track ablation is particularly suited for track ablation because it provides sharp boundaries between living and cauterized tissue with reduced risk of tissue adhesion by concentrating current densities through direct conduction to the tissue.

Applicant notes that Moorman indicates at column 16, lines 45-63 that the needle markings proposed by Moorman can be used with prior art RF ablation devices. However, one of ordinary skill in the art reading this description would understand Moorman to be suggesting that one could simply mark the outside of standard RF ablation electrodes with a spacing that indicates the electrodes general ablation range.

For these reasons, it is believed that claims 5-8 and 10 are in condition for allowance, and allowance is respectfully requested.

Respectfully submitted,

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